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Research and Development
Analytical Services
Tonawanda, NY
March 26, 1986

RECEIVED

MAR 27 1986

B. J. HANSEN

Dr. D.J. Hansen
UMETCO Minerals Corporation
137 47th Street
Niagara Falls, NY 14302

Dear Don:


Enclosed is a copy of the most recent version of N.Y.S. Industrial Code Rule 38, Ionizing Radiation Protection. I have managed to extract several bits of information from my own copy which may save you some time, at least as concerns your situation there at UMETCO.

Please refer to Table 5, p. 58. The loose material we are dealing with would appear to fall under the description of Part(c). Referral to Table 2, Column 2, on pp. 36-40 reveals the exempt quantities for a number of radionuclides, in microcuries per milliliter (per gram for solids). This Table, as you remember, was the one you didn't have available when we met last Friday, March 21. As you can see, neither of the elements we suspect of being present, thorium and uranium, are listed. Instead, these elements fall under the definition (p. 6, part 11) of source material, the limit for which (Table 5, Part (c)(2)) is 0.05 percent by weight.

It would therefore appear that we must identify the individual radioisotopes causing the elevated activity readings observed so far in our lab here at Tonawanda. This would have to be done on the outside, since our instrumentation can determine total radioactivity only and not that attributable to individual radioisotopes. If thorium and uranium were determined to be the cause, the next step would be to determine whether or not they are present at greater than 0.05 weight percent.

Please feel free to contact me with any questions. I will contact you when I've completed the radioassay of the samples I removed last Friday from the areas in question.

Sincerely,


W.D. Smith

WDS/nmw
Enclosure
1891r

UCCNHT0000726



STATE OF NEW YORK
DEPARTMENT OF LABOR
STATE OFFICE BUILDING
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BUFFALO, N Y 14202

RAMONA L GALLAGHER
Assistant Commissioner of Labor

INVESTIGATIVE REPORT

Umetco - 47th and Royal Avenues, Niagara Falls

Report prepared by Robert F. Kelly on 25 MAR 86.

Report reviewed by _____ on _____.

On 20 MAR 86 after obtaining soil samples on the Umetco property, Dr. Richard Hanson related to me possible "problem" areas when he performed an external radiation survey of the plant facilities a short time ago.

There are four possible problem areas; all seem minor since external readings almost at contact showed levels at about 3-5 times background.

These are described below:

- A) "Rock area" outside Building 24 -- This area shows some potential for a bigger problem; rocks on frozen grounds showed the readings mentioned above. Warmer weather will let facility determine what is under these piles.
- B) Number 6 Furnace Room in Building 77 - Area shows slight contamination; its mainly on surface and doesn't seem to be a big problem.
- C) Building 24 -- dust near furnace. Again doesn't seem to be a big hazard.
- D) Samples in cans -- Now located in caged area in Building 25, they will be shipped as radioactive waste.

As related to Dr. Hansen, samples are to be analyzed in all three areas listed above and results sent to the Department. If within the limits, the Department will resurvey premises to insure compliance with Coderule 38.

Robert Kelly
Associate Radiophysicist

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